



NOMBRE _____ CURSO _____

TEMA 2. ALIMENTACIÓN Y NUTRICIÓN. VOCABULARIO

De cada palabra escribe su definición, un ejemplo si te lo pido y su traducción al inglés. No olvides pegarlas en tu cuaderno.

- a) GLUCOSA

- b) ALMIDÓN

- c) HEMOGLOBINA

- d) COLESTEROL

- e) FIBRA

- f) AMINOÁCIDO

- g) AMINOÁCIDO ESENCIAL

- h) PROTEÍNA

- i) CALORÍA.

- j) METABOLISMO BASAL

- k) ANEMIA

- l) ALIMENTO TRANSGÉNICO

- m) ADITIVO ALIMENTARIO

FEEDING AND NUTRITION.

Definitions

Here you have 5 key words of this Unit. You have to study them. If you include more definition in your notebook, you will have extra points in your notebook marks.

1. **NUTRIENTS:** The food substances which provides us with the materials and the energy necessary to carry out our vital functions.
- 2.

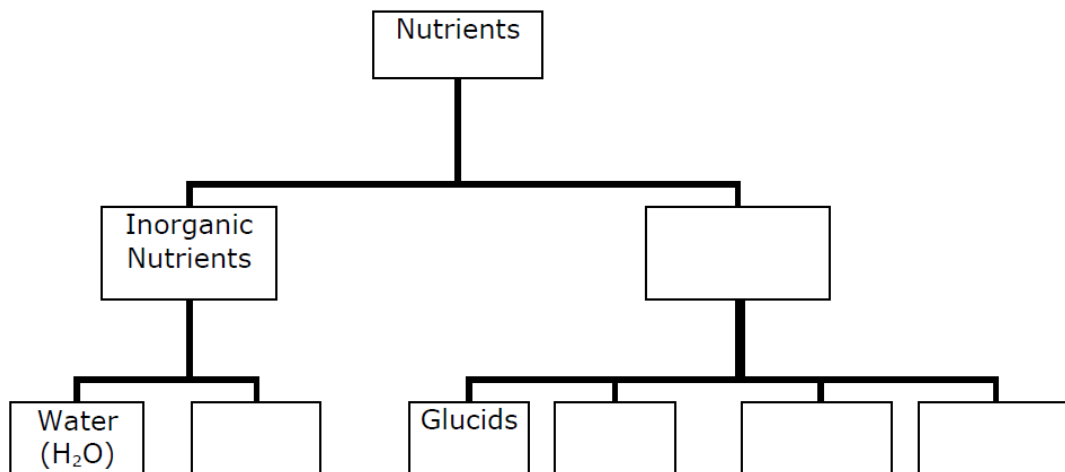
Nutrition: Getting the matter and the energy that every living being needs to grow, survive and reproduce. As it also involves the removal of waste substances and residual energy, it can be described as an exchange of matter and energy with the environment.

4. **Feeding:** The ingestión of food which we select from our environment and constitutes our diet.
5. **Diet:** The quantity and the type of food we eat.
6. **Additives:** Substances added to food to improve its taste, to preserve flavour or make it look more attractive and prevent it from spoiling.

1. Starch	2. Food	3. Carbohydrates
4. fat	5. Sucrose	6. Glucose
7. haemoglobin	8. Meat	9. Nuts
10. cholesterol	11. Butter	12. Sweets
13. Food wheel	14. weight	15. disease
16. label	17. constipation	18. lettuce
19. healthy	20. skim milk	21. peanut

NUTRIENTS AND FOOD. TYPES OF NUTRIENTS

1. Complete the scheme about the different types of nutrients:



2. Include the following words into the scheme above:

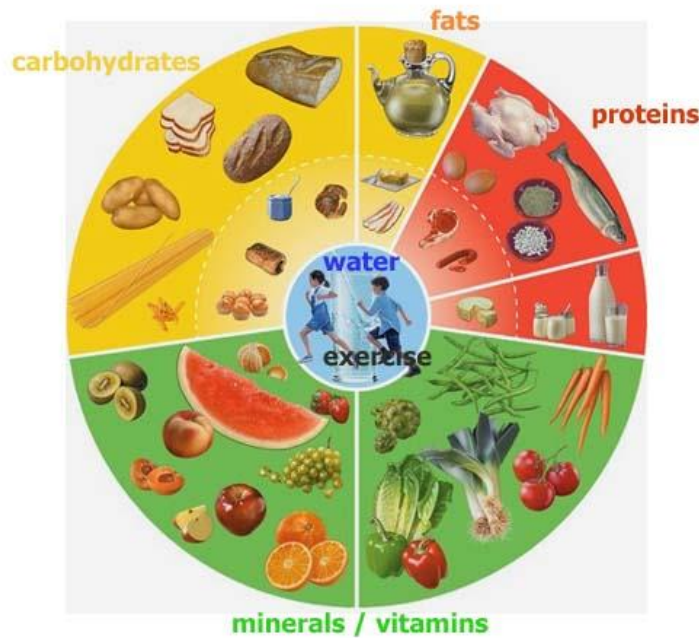
Starch / triglyceride / glucose / A / fructose / fatty acids / casein / E / cellulose /
haemoglobin / sodium chloride / cholesterol / albumin / C / amino acids / fibre /

3. Complete this table

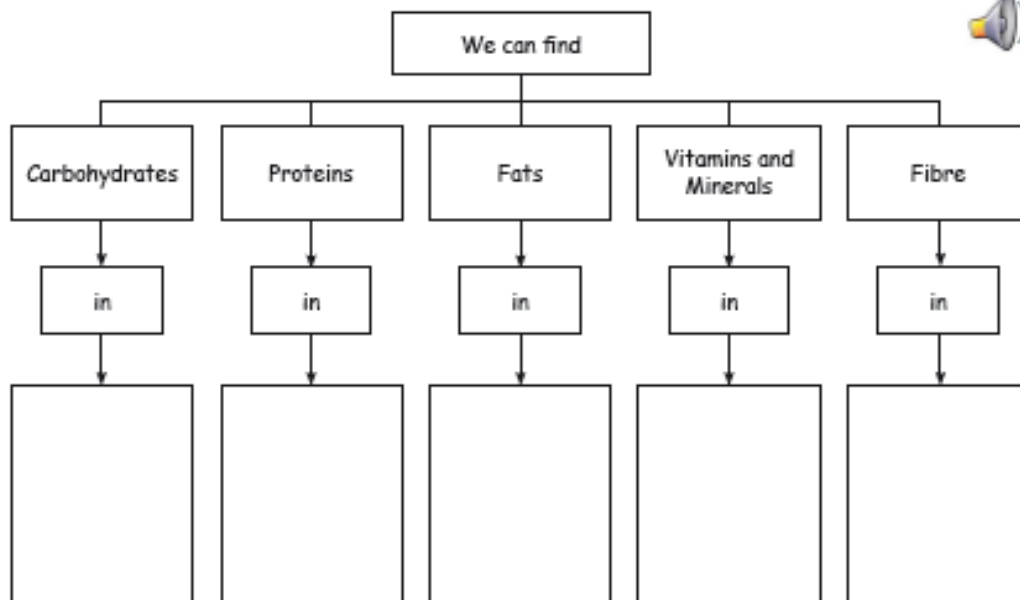
Nutrient	10 examples of food that provides it
Vitamins and fibre in vegetables	
Glucids and vitamins in fruits	
Lipids in vegetable oils and animal fats	
Starch	
Proteins	

THE FOOD WHEEL

This is the food wheel



1. Complete the following chart



2. Classify the foods in photograph A according to the group on the food wheel they belong to.



group	Nutrient more abundant	Function
I		

3. If one of your friends is a vegetarian, what kind of food could supply proteins to her diet?
4. If one of your friends is suffering constipation, what food would you recommend to him?
5. Try to make a food wheel per group in A3 size

FOOD LABELS

Scavenger hunt about food labels. Food is an energy resource and there are some foods that have more energy in them than others. Read the food



labels you have been given and see if you can find the answers to these questions:

- a) How much protein is in one serving of beef burger?
- b) How much protein is in 100 g of beef burger?
- c) How many grams of sugar are in one serving of burger?
- d) What percent of the daily value of salt (sodium) is in one serving of Mini chicken breast fillets?
- e) How much fat is in 100 g of burger? What is the percentage of fat in the burger?
- f) And how much fat is in 100 g of chicken breast? What is the percentage of fat in the chicken breast?
- g) If you are trying to lose weight, which kind of meat should you eat, and why?
- h) How many carbohydrates are in one serving of mushy peas?.....
- i) How much energy is in one serving of mushy peas?
- j) What is the main ingredient in Fingers?

Remember: there are 28 grams (g) in 1 ounce (oz)

100 % beef burgers

Nutrition			Ingredients
Typical values	Per burger	Per 100 g	Beef (98%), Flavourings,
Energy	551 kJ	1279 kJ	SALT, dextrose, yeast
	133 kcal	308 kcal	extract, onion powder, black
Protein	9.4 g	21.9 g	pepper, black pepper extract
Carbohydrate	0.4 g	0.8 g	
Of which sugars	0.2 g	0.3 g	Gluten free
Of which starch	0.2 g	0.5 g	
Fat	10.4 g	24.1 g	
Of which saturates	4.4 g	10.1 g	Healthy hints:
Of which mono-unsaturates	4.7 g	11.0 g	Reducing the total fat in your diet,
			particularly saturated fat, may help
			to maintain a healthy heart
Of which polyunsaturates	0.2 g	0.6 g	
Fibre	0.4 g	0.8 g	
SALT	0.4 g	1.0 g	

TESCO		NUTRITION INFORMATION	
Every little helps		150 g (5 ¼ oz)	100 g (3 ½ oz)
		provides:	provides:
		Energy	549 kJ / 129 kcal
		Protein	6.6 g
		Carbohydrate	18.2 g
		of which sugars	2.9 g
		Fat	0.3 g
		of which saturates	0 g
		Fibre	4.1 g
		Sodium	0.5 g

This can contains two servings

A serving (150 g) contains the equivalent of approx. 1.2 g of salt

extra crunchy Fingers			
NUTRITION INFORMATION		Per 100 g	Per biscuit
Energy	kJ	2110	115
	kcal	505	25
Proteins	g	6.6	0.4
Carbohydrates	g	66.2	3.5
Fats	g	23.6	1.3

FRESH SKINLESS MINI CHICKEN BREAST FILLETs

TESCO
Every little helps

GUIDELINE DAILY AMOUNTS

EACH DAY	MEN	WOMEN
CALORIES	2500	2000
FAT	95 g	70 g
SALT	7 g	5 g

These figures are for average adults of normal weight. Your own requirements will vary with age, size and activity level.

NUTRITION INFORMATION

TYPICAL COMPOSITION 100 g (3 ½ oz) provide

Energy	421 kJ / 99 kcal
Protein	23.9 g
Carbohydrate	0 g
Of which sugars	0 g
Fat	0.4 g
Of which saturates	0.1 g
Fibre	0.3 g
Sodium	0.3 g

LEARNING ABOUT FATS

1. Read the text and answer the questions:

Fat is a component in food. Some foods, including most fruits and vegetables, have almost no fat. Other foods have plenty of fat. They include nuts, oils, butter, and meats like beef.

The name - fat - may make it sound like something you shouldn't eat. But fat is an important part of a healthy diet. And little kids, especially, need a certain amount of fat in their diets so the brain and nervous system develops correctly. That's why toddlers need to drink whole milk, which has more fat, and older kids can drink low-fat or skim milk.



How much fat should you eat? Experts suggest kids who are 6 to 8 eat 48 to 60 grams per day. Older kids, between 9 and 12, should eat about 60 to 75 grams. That's about 27% of a kid's daily calories. Babies need more, but kids older than 2 and adults should get less than 30% of their daily calories from fat, nutrition experts say. You can figure out how many grams of fat are in a food by looking at the food label.

Types of Fat

You might see ads for foods that say they're "low-fat" or "fat-free". Lower-fat diets have been recommended for health and to help people lose weight. But nutrition experts are finding that fats are more complicated and that some kinds of fat are actually good for your health. As a bonus, fat in food helps people feel full, so they don't eat as much.

But that doesn't mean a high-fat diet will be good for you. And some fats are better than others. Here are the three major types:

Unsaturated fats: These are found in plant foods and fish. These may be good for health. The best of the unsaturated fats are found in olive oil, peanut oil, canola oil, albacore tuna, and salmon.

Saturated fats: These fats are found in meat and other animal products, such as butter, cheese, and all milk except skim. Saturated fats are also in palm and coconut oils, which are often used in commercial baked goods (the kind you buy at the store). Eating too much saturated fat can raise blood cholesterol levels and increase the risk of heart disease.

Trans fats: These fats are found in margarine, especially the sticks. Trans fats are also found in certain foods that you buy at the store or in a restaurant, such as snack foods, baked goods, and fried foods. When you see "hydrogenated" or "partially hydrogenated" oils on an ingredient list, the food contains trans fats. Like saturated fats, eating too much can raise cholesterol and increase the risk of heart disease.

Why Do We Need Fat?

Fats fuel the body and help absorbing some vitamins. They also are the building blocks of several hormones and of cell membranes, and they insulate nervous system tissue in the body.

So fat is not the enemy, but you'll want to choose the right amount - and the right kind - of fat. If you're getting most of your fat from protein-rich meats, nuts, and heart-healthy oils, you've already made fat your friend!

Modified from: Mary L. Gavin, MD – 2008 (www.kidshealth.org)

Questions:

- a) What is the meaning of "ads" in the fourth paragraph?
- b) Do you remember what fats are used for?
- c) Write ten examples of foods that are low in fats.
- d) Write ten examples of foods that are rich in fats.
- e) How many types of fat are there?
- f) How much fat should you eat every day?
- g) Which type of fat do you think is the best and why?
- h) Which type of fat do you think is the worst and why?

Basal Metabolic Rate

Your Basal metabolic Rate (BMR) is the rate at which your body uses energy while at rest to keep vital functions going, such as breathing and keeping warm. It is a good formula to work into your diet regimen to understand how much fuel you need to survive. Here is the formula:

For men: $BMR = 10 \times \text{weight (kg)} + 6.25 \times \text{height (cm)} - 5 \times \text{age (years)} + 5$

For women: $BMR = 10 \times \text{weight (kg)} + 6.25 \times \text{height (cm)} - 5 \times \text{age (years)} - 161$

Once you know your BMR you need to calculate your daily caloric needs based on your activity level. To determine your total daily calorie needs, multiply your BMR by the appropriate activity factor, as follows:

- If you are sedentary (little or no exercise) : Calorie-Calculation = $BMR \times 1.2$
- If you are lightly active (light exercise/sports 1-3 days/week) : Calorie-Calculation = $BMR \times 1.375$
- If you are moderately active (moderate exercise/sports 3-5 days/week) : Calorie-Calculation = $BMR \times 1.55$
- If you are very active (exercise/sports 6-7 days a week) : Calorie-Calculation = $BMR \times 1.725$
- If you are extra active (very hard exercise/sports & physical job or 2x training) : Calorie-Calculation = $BMR \times 1.9$

1- Calculate your BMR

CALCULATING CALORIES

2- Calculate how many calories you can obtain from the following meal:

Lunch:

- one serving of spaghetti (80 g) with cheese (50 g) and tomato sauce (100 g of tomato and 20 g of olive oil)
- a pork chop (125 g) with chips (100 g) and lettuce (75 g)
- an apple (150 g)
- 50 g of bread

Total amount of kcal from this meal:

Food	Energy (kcal per 100 g of food)
apple	47.1
chips	245.6
Pork	252.7
bread	258.7
tomato	17.9
cheese	377.2
spaghetti	374.1
lettuce	13.9
Olive oil	852.8

Energy needs (Kcal/day)		
	Men	Women
Young	3,000	2,400
adult	2,600	2,000
old person	1,900	1,400

Remember: Every day about 55 % of energy you obtain from food should come from glucids; about ---- % from lipids and about ---- % from proteins.

- a) Usually about the 20 % the energy should come from breakfast, about 40 % from lunch and about 20 % from dinner. According to this, do you think the lunch above is a balanced one or not?
- b) Where do you think the remaining 20 % of energy comes from?
- c) If we get too much energy from our diet we -----
- d) If we get too little energy from our diet we -----